

ABSTRACT

An apparatus and method for scanning the surface of a specimen is disclosed for defect inspection purposes. Scanning Electron Microscope (SEM) is used to scan the surface of a specimen. The scanning method employed by the SEM comprises the steps of: generating a
5 particle beam from a particle beam emitter, and scanning the surface of the specimen by bending the particle beam at an angle with respect to the surface of the specimen, wherein the particle beam traverses an angle that is not parallel or perpendicular to the orientation of the specimen. The specimen being scanned is a semiconductor wafer or a photomask.